REBUTTAL TESTIMONY

OF

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TELECOMMUNICATIONS DIVISION

ILLINOIS COMMERCE COMMISSION

AMERITECH ILLINOIS

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Q. What is your name, title and business address?

A. My name is Genio Staranczak. I am employed by the Illinois Commerce Commission as principal economist in the Telecommunications Division. My business address is 527 East Capitol Avenue, Springfield, Illinois 62701.

Q. Are you the same Genio Staranczak that filed testimony in this docket on behalf of Staff on November 3, 2000.

A. Yes, I am.

Q. What is the purpose of your rebuttal testimony?

A. The primary purpose of my testimony is to respond to GCI's, City of Chicago's and Ameritech Illinois'(AI or Ameritech) analysis of and recommendations for the price cap formula.

EARNINGS SHARING

Q. GCI witness Charlotte Terkeurst proposes that alternative regulation should include an earnings sharing component. Do you agree?

A. No. Adding an earnings sharing component to alternative regulation is not advisable because it: (1) would be a step backward towards rate of return regulation; (2) would substantially increase regulatory costs; (3) is inconsistent with the evolution of a competitive telecommunications market; and (4) would blunt the incentives provided Ameritech to be more efficient. If an earnings sharing requirement were added to the alternative regulation plan the Commission would have to thoroughly examine Ameritech's expenses, revenues, depreciation rates, cost of capital and earnings on an annual basis in the same way it did when Ameritech was subject to rate of return regulation. In addition to this the Commission would be required to monitor Ameritech's price performance to determine if it was in compliance with the alternative regulation plan. Ameritech in effect would be regulated twice, on a price basis consistent with alternative regulation and on an earnings basis consistent with rate of return regulation. Regulatory costs would increase substantially as a result.

Earnings sharing is inconsistent with competition. Under earnings sharing the Commission would have to move all services back into the regulated rate base[1]. Some of these services are currently competitive while others are likely to become competitive over the next several years. If Ameritech started to lose money on services facing competition, and earnings fell below the lower earnings benchmark as a result, an earnings sharing requirement would allow Ameritech to recoup at least some of these losses through the sharing mechanism. Subscribers of non-competitive services could

[1] Alternatively the Commission could split the rate base between competitive and non-competitive services and impose earnings sharing only on non-competitive services. However, this would be impossible to

potentially be forced to pay higher prices for losses Ameritech incurred in competitive services under earnings sharing. It is inappropriate for subscribers of non-competitive services to pay higher prices in order to compensate Ameritech for losses it incurred in the competitive arena.

Finally, earnings sharing would reduce the incentives that alternative regulation has provided Ameritech to be more efficient. Under sharing, once Ameritech reaches the earnings limit, it must share any further efficiency gains it achieves with subscribers. This decreases the incentive to increase productivity further and provides an incentive for Ameritech to engage in anti-competitive behavior.

THE "Z" FACTOR

Q. I recommended in direct testimony that Ameritech Illinois be expressly allowed exogenous factor treatment to offset Commission mandated rate changes. GCI witness Ms. Terkeurst argues that Ameritech Illinois should not be allowed automatic offsets for all Commission mandated rate changes. Please summarize her reasoning.

A. Ms. Terkeurst argues that automatic offsets for all Commission mandated rate changes would circumvent the Commission's discretion to determine whether the price

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accomplish in any meaningful way because common and fixed costs cannot satisfactorily be allocated between competitive and non-competitive services.

regulation formula is just and reasonable absent the offset. In addition Ms. Tekheurst states that it is often difficult to estimate the overall revenue impacts of Commission mandated rate changes and by implication argues that it would therefore be difficult to determine what the appropriate size of the offsetting rate increases should be.

Q. What is your response to Ms. Terkeurst's testimony on this issue?

A. First, I agree with Ms. Terkeurst that exogenous cost changes should be limited to factors that are truly outside of Ameritech Illinois' control and that would not be picked up in the economy-wide inflation factor. However, Commission mandated rate reductions fulfill both of these criteria: they are outside of Ameritech's control and are not picked up by the economy-wide inflation factor. Consequently, it is logical that Ameritech should be allowed exogenous factor treatment under these circumstances.

It is understandable that the Commission should want some flexibility built into the price cap plan to deal with issues that cannot be satisfactorily dealt with elsewhere and the "Z" factor is a place where such discretion could be exercised. Nonetheless, I am of the opinion that this discretion should be used sparingly and only under compelling circumstances.

I object to Ms. Terkeurst's apparent desire to use the "Z" factor as a mechanism for managing Ameritech's earnings. If Ameritech's earnings are high, Ms. Terkeurst is of the opinion that the Commission should mandate rate reductions and not allow

Ameritech to recover the revenues lost from such a rate reduction. In this manner, the Commission could move Ameritech's earnings to more "desired" levels. However, the "Z" factor was designed to account for exogenous changes, not as a device to manage Ameritech's earnings under alternative regulation and it is improper to attempt to use it as such. If the Commission truly wants to manage Ameritech's earnings it should order the Company subjected to rate of return regulation.

Ms. Terkeurst also argues that it is difficult to estimate what the exact revenue impacts of Commission ordered rate reductions are. This is because the rate cut might stimulate demand and offset some if not all of the revenue reduction from existing demand caused by the rate cuts. Whether it is difficult or straightforward to estimate revenue impacts from rate changes is, however, immaterial to the question at hand, which is whether Ameritech should be permitted to recover revenue lost from Commission mandated rate cuts through the exogenous change factor. While it may be difficult to estimate revenue impacts from rate changes, both the net revenues lost from mandated rate reductions and any net revenue increases allowed through the "Z" factor can and should be properly estimated and the Commission can incorporate use of the appropriate demand elasticities as well as take into account cost impacts.

Q. Dr. Selwyn on behalf of the City of Chicago also has reservations about allowing offsets to Commission mandated rate reductions through the exogenous cost factor within the price cap formula. Please summarize those concerns.

A. Dr. Selwyn has two concerns. First, he argues that Ameritech has provided no evidence that it would voluntarily ask for immediate negative Z-adjustments in the event that a particular exogenous cost is found to decrease. Second, he states that Ameritech seeks to be made whole with respect to rate decreases ordered by the Commission but would give no effect whatsoever to increases that the Company has been able to effect as a result of having services classified as "competitive" when in fact effective competition did not exist.

Q. How would you respond to Dr. Selwyn's arguments?

First, Dr. Selwyn is correct in stating that Ameritech has no incentive in voluntarily asking for negative "Z" factor adjustments should a negative exogenous change occur. But this alone is not a justifiable rationale for denying Ameritech rate relief from Commission mandated rate reductions.

Second, if Ameritech is increasing revenue by having services declared competitive, and then raising prices because effective competition does not exist then this problem should be addressed directly. If Ameritech has inappropriately declared services competitive, then the solution is not to deny exogenous treatment for Commission mandated rate changes to "even things out," but to take steps to return inappropriately classified services back to the non-competitive category.

THE "X" FACTOR

Q. GCI witness Dr. Selwyn argues that the "X" factor in the price cap formula should be 6.5%. How does Dr. Selwyn arrive at this conclusion?

A. First, Dr. Selwyn argues that "X" factor should be based on industry data rather than Ameritech data. Second, he argues that the United States Telecom Association (USTA) industry productivity study filed by Ameritech witness, Dr. Meitzen is flawed because it uses deflated revenue to measure output rather than physical quantities. Finally, he argues that since the USTA study is flawed that the Commission should rely on the FCC study of LEC productivity growth to arrive at the appropriate offset since the FCC study uses physical quantities rather than deflated revenues to measure output. The FCC concluded, based on its analysis of LEC productivity growth that the appropriate offset was 6.5%, which included a 0.5% consumer dividend.

Q. Please discuss each of Dr. Selwyn's points individually. First, should the "X" factor be based on industry parameters or company specific parameters?

A. For the reasons I gave in my direct testimony, I agree with Dr. Selwyn that the "X" factor should be based on industry benchmarks rather than individual firm benchmarks.

Q. Is it more appropriate to use physical quantities or deflated revenues to measure output?

A. In my opinion, deflated revenues can properly be used. Both the price deflated revenue approach and the physical quantity approach will yield identical output growth estimates when the output disaggregation is sufficiently detailed. This is because there are basically two ways to measure output. First, one can disaggregate what a firm produces into homogenous physical product categories and then calculate the growth in physical quantities for each of these categories and weight the growth rate for each of the categories by the revenue in that category to arrive at total output. Alternatively one can disaggregate what a firm produces into homogenous physical product categories, calculate the price change for each physical product category and deflate the revenues for that category by the calculated price index. One could then estimate the growth rates for deflated revenue by category and then weight the growth rate for each of these categories by the revenue in the category to arrive at total output. Output growth measured under either approach would be the same.

Q. You state that measured output growth will be the same whether it is proxied by physical quantities or by price deflated revenue when production is disaggregated into homogenous categories. What if production cannot be disaggregated into homogenous categories?

A. If output cannot be disaggregated into homogenous categories then it is preferable to use price deflated revenues than to use physical quantities. This is best illustrated by examining the LEC productivity study conducted by both the FCC and the USTA. One of the revenue categories identified in both studies is labeled local service. Local service revenue consists of revenue from access lines, local calls, vertical services, installations and miscellaneous local services. Proxying local output growth by just one physical quantity measure, such as calls, therefore will be inaccurate and inappropriate if the growth of calls is not the same as the growth of other physical quantity measures such as access lines, vertical services, installations, etc., that are also part of the local category. If the growth rate for various local services is not the same, it is more appropriate to construct a price index based on the services in the local revenue category and deflate revenues by this price index to arrive at output.

Q. Is this the reason that output in the economy as a whole is typically measured by using price deflated revenue rather than physical volumes?

A. Yes. Typically, economy-wide output measures such as gross domestic product (GDP), are computed using price deflated revenue rather than physical quantities. Similarly, output for the private business sector, which is used to calculate economy-wide total factor productivity is computed using price deflated revenue rather than physical quantities. Again, this is because it is difficult, if not impossible to disaggregate what the economy produces into homogenous product categories and it

is inappropriate to proxy output growth of a heterogeneous production category by just one of the physical quantities included in that heterogeneous production category.

Q. Please comment on the methodology used by the FCC to arrive at its 6.5% "X" factor.

A. The FCC LEC productivity study is methodologically flawed, and consequently produces inaccurate output growth, input price growth and productivity growth estimates. The flaws include (1) proxying local output by local calls and subsequently local minutes; (2) excluding miscellaneous revenues from the output measure; and (3) inappropriately computing capital input prices.

Q. Why is measuring local output by the number of locals calls inappropriate?

A. As indicated earlier local revenue is derived from a number of services, including access lines, local calls, and vertical services to name a few. Proxying local output by local calls is inappropriate if the growth rate of calls is different than the growth rate of other physical quantities such as access lines, vertical services etc that are also part of the local service category. Moreover, LECs typically derive more revenue from access lines than from local calls, and consequently it is preferable (although still inappropriate) to proxy local output by access lines than calls.

Q. The FCC has more recently switched its local output measure from calls to minutes. Does this change ameliorate your concerns?

A. No. Proxying local output by the number of local minutes actually introduces more biases into the output measure for price cap purposes. This is best illustrated by the following example. Assume there exists a local exchange carrier that offers flat rated local service (i.e. does not price on a per minute basis). Further suppose that there is no line growth for this LEC but because of increasing internet use local minutes are rising by 5% per year. Finally assume that these local minutes can be provisioned at no cost.

Let us now assume that we want to establish an "X" factor for this LEC. If we proxy output by minutes (as the updated FCC methodology would do) the firm's output and productivity growth is 5%. If we proxy output by lines (or deflated revenue) then the firm's output and productivity growth is 0%. The question is what is the best measure of this LEC's output and productivity growth for price cap purposes? The answer in this case is clearly 0%. If we set an "X" factor of 5%, the financials of our hypothetical firm would markedly deteriorate. This is because the firm does not get any revenue from increasing minutes of use - it prices on a line rather than on a minute basis. It is therefore inappropriate to establish an "X" factor based on a minutes of use output measure when the firm does not price on a minutes of use basis but on a line basis. The output measure used for price cap purposes must correspond to how the LEC actually prices its output. In this example, the FCC methodology of basing output on

minutes would clearly arrive at the wrong "X" factor for the LEC. A methodology that used deflated revenue would arrive at the appropriate "X" factor[2].

Q. Why did the FCC exclude miscellaneous revenue from its computation of LEC output?

A. The FCC excluded miscellaneous revenue from its output calculation because miscellaneous revenue consists of a heterogeneous set of services and it is difficult to come up with an appropriate price index to deflate these revenues to compute an output measure. In essence, the FCC chose to ignore miscellaneous output because it is difficult to measure.

Q. Was the FCC justified in excluding miscellaneous revenue from its output calculation?

A. No. The fact that it is difficult to measure miscellaneous output does not mean that it is rational to exclude miscellaneous output from a calculation of total LEC output. There are many sectors in the economy for which it is difficult to measure output (e.g. banking, insurance, computers). Nonetheless, agencies responsible for monitoring output of such economic sectors have developed effective methods of estimating that output. The computer sector, for example, produces machines that differ widely in terms of

[2] I should note that in contrast to some LECs, Ameritech does price local messages and in some cases local minutes. Since local minutes tend to grow at a faster rate than lines, Ameritech's productivity for

size, weight, processing time, memory and software capabilities to name only a few characteristics. Yet, the Bureau of Economic Analysis (BEA), the federal government agency in charge of measuring economy wide output includes a measure of computer output (based upon deflated revenue) when it compiles its most widely quoted economy wide output measure - GDP. The BEA does not exclude the computer sector from its calculation of GDP even though it is difficult to come up with a measure of computer output, because excluding computer output would bias the GDP measure. That is, the growth in economy wide output excluding the computer sector could be substantially different from growth of economy wide output including the computer sector. Similarly, productivity of the economy excluding the computer sector would be substantially different than productivity in the economy including the computer sector. This is because computer output growth is different than output growth in other sectors of the economy. Similarly, if growth of miscellaneous output is different than growth of other LEC output, excluding the output of miscellaneous services will bias the measure of LEC total output and LEC total productivity growth. The BEA approach is based on the premise, with which I concur, that it is preferable to estimate total output, admittedly somewhat imperfectly, than to estimate output only for easy to measure sectors and use this as a proxy for total output[3].

Q. Please describe how the FCC measured capital costs and capital input prices.

price cap purposes may be a bit higher than the industry average as a result.

[3] In other words it is more imperfect to exclude output than to measure output imperfectly.

A. The FCC measured capital costs by what is commonly known as the residual rate of return approach. Under this approach capital costs are derived by subtracting labor costs and material costs from total revenue. The "residual" is then labeled as capital costs and essentially consists of depreciation expenses, debt payments, profits and corporate income and related taxes. Capital input prices are estimated by dividing capital costs by constant dollar capital stock.

Q. Is it appropriate to measure capital costs residually?

A. No. As stated previously, under the residual rate of return approach capital costs consist of what a company paid out in depreciation expenses, what it earned in profit, etc. That is under the residual rate of return approach what a company or industry earns in profit and what this implies for the rate of return on common equity for a particular year becomes the cost of equity for that year. For example, under the FCC approach if the LECs earned profits consistent with a 20% rate of return on common equity one year that would be the cost of equity that year. Similarly, if the industry earned profits consistent with a 4% rate of return on common equity the next year, that is the cost of equity that year. In other words, the FCC approach implies that whatever a firm earns in a year is the cost of equity that year. However, the cost of equity should properly reflect not what a company or industry actually earned in any particular year but rather what investors needed or expected it to earn. For example, Staff currently is of the opinion that the cost of equity for Ameritech is properly in the 13% range. Under the FCC approach, Ameritech's cost of equity is what it is earning - currently more than

20%. The FCC approach therefore inappropriately measures capital costs and capital input prices.

The FCC has subsequently determined that its approach to this question is flawed and has, as a result, attempted to proxy LEC invested capital costs by the interest rates on Baa bonds. However, this is also inappropriate because the interest rate on Moody Baa rated bonds is not a good proxy for equity costs. It is possible for interest rates to fall while equity costs increase and vice versa. In 1994, for example, the Commission found going into the current alternative regulation plan, that Ameritech's proper cost of equity was 11.36%. Staff currently is of the opinion that Ameritech's cost of equity is over 13%. On the other hand, Ameritech's cost of new debt in 1994 was 7.76%, while it is currently 7.3%. Consequently, over the 1994 to 1999 period Ameritech's debt costs fell while its equity costs rose - and the updated FCC methodology would fail to capture such a phenomena. To conduct a proper productivity study the FCC must come up with separate debt and equity costs for the LECs as well as a specific debt/equity ratio. Since it does not do so, it cannot properly be used for the purpose Dr. Selwyn uses it.

Consumer Dividend

Q. Mr. Gebhardt in his rebuttal testimony argues that the consumer dividend should be eliminated in this review. Please summarize his reasoning.

A. Mr. Gebhardt states the 4.3% "X" factor, which includes a 1% consumer dividend, had the effect of flowing through more "productivity[4]" gains than the Company actually achieved which Ameritech estimates to be 3.5%. As a result, according to Mr. Gebhardt, consumers of noncompetitive services "overbenefited" during the first five years of the Plan.

Q. How do you respond to Mr. Gebhardt?

A. First, I would note that Mr. Gebhardt does not dispute Staff's conclusion that on a company wide basis Ameritech passed on less than half of the productivity gains it achieved to consumers. Second, it appears that Ameritech passed along virtually none of productivity gains it achieved to consumers of its non-basket services. That is prices of non-basket services (i.e. services outside of the non-competitive baskets) rose at about the same rate as general inflation[5]. Consumers of non-basket services, therefore, "underbenefited" during the last five years.

Q. It appears the present alternative regulation plan caused prices of non-competitive services to fall more than productivity gains would have allowed while at the same time the prices of non-basket services rose even though

[4] In this context "productivity" refers to the combined input price and productivity differential between Ameritech and the economy as a whole.

[5] The price of non-basket services can be derived implicitly from data filed by Ameritech First overall company prices are estimated from the Ameritech productivity study filed in DR CUB 3.1 by dividing Company revenues by Company output. Prices for non-basket services are then calculated by factoring out prices and revenues for basket services provided in DR responses JH 2.01 and JH 2.02.

productivity gains would dictate they should fall. Is the current plan moving prices in the right direction?

A. No, it is not. Alternative regulation should be moving prices toward cost rather than away from cost. If prices of non-competitive services are falling more than productivity gains suggest they should then it is difficult for competitors to enter the market and compete for customers since the services in question may no longer be priced high enough to warrant entry. Prices could still be higher than LRSIC but not be sufficiently high for competitors to recover common and fixed costs. On the other hand if prices of non-basket services are rising, when productivity gains suggest they should fall then consumers are paying much higher rates than they should. In both markets, non-basket and non-competitive, prices are moving away from cost while economic efficiency requires that prices should move closer to cost.

Q. Would eliminating the consumer dividend solve the problem?

A. Eliminating the consumer dividend would at best solve only part of the problem, but at a very high price. Eliminating the consumer dividend would ensure that rates for non-competitive services would not be required to fall at a rate which exceeds productivity gains. However, the cost of eliminating the consumer dividend outweighs this benefit. Eliminating the consumer dividend would reduce consumer benefits and increase profits for Ameritech, which on a total company basis is already earning high returns. In

addition, eliminating the consumer dividend does nothing for consumers of non-basket services who would continue to pay prices higher than productivity gains suggest they should.

"X" Factor

Q. In testimony filed on November 3, Staff stated that it had reservations about how the price of capital estimated in the USTA productivity study filed by Dr. Meitzen. Do you still have the same reservations?

A. I continue to have reservations concerning how Dr. Meitzen calculated the price of capital but his methodology, even though inappropriate, does not seem to have biased the productivity and input prices estimates much. In the USTA productivity study, Dr. Meitzen proxied the cost of invested capital by using figures derived from the economy as a whole whereas the study should have used figures that were specific to the telecommunications industry. Secondly, the USTA productivity study should have used separate debt and equity components as well as an explicit debt/equity ratio to compute the cost of invested capital but did not. Finally, for each and every year of the USTA productivity study, economic costs as measured by Dr. Meitzen exceed industry revenues by a substantial margin[6]. This is simply not a credible result[7], and only occurs because Dr. Meitzen did not measure capital costs properly. Nevertheless, the

[6] See DR response JH-1.14.

analysis Staff conducted through various data requests suggests that USTA's productivity and input price estimates do not change much when more appropriate capital measures are used. Consequently, Staff is not willing to reject the figures filed in the USTA productivity study although it still believes the methodology used to compute those figures is flawed.

Q. Does that conclude your testimony?

A. Yes it does.

[7] In the Ameritech productivity study, where Dr. Meitzen more properly estimates capital costs, company revenues generally exceed economic costs.